**CURRICULUM VITAE**

**Hannah L. Chung, M.D.**

**PRESENT TITLE AND AFFILIATION**

**Primary Appointment**

Assistant Professor, Department of Diagnostic Radiology, Section of Breast Imaging, University of Colorado Anschutz Medical Campus, Aurora, CO

**CITIZENSHIP**

United States

**EDUCATION**

**Degree-Granting Education**

Ohio State University College of Biological Sciences, Columbus, OH, BS, 1991, Biological Sciences

Ohio State University College of Medicine, Columbus, OH, MD, 1995, Medicine

**Postgraduate Training**

Clinical Internship, MacNeal Hospital, Chicago, IL, 7/1995-6/1996

Clinical Fellowship, Nuclear Medicine, University of Utah, Salt Lake City, UT, Fellowship Director-Frederick Datz, MD, 7/1996-6/1997

Clinical Residency, Diagnostic Radiology, University of Utah, Salt Lake City, UT, Residency Program Directors Paula Woodward, MD and Marc V. Gosselin, MD, 7/1997-6/2001

Clinical Fellowship, Breast Imaging, University of California Los Angeles (UCLA), Los Angeles, CA, Fellowship Director-Lawrence Bassett, MD, 7/2001-12/2001

**CREDENTIALS**

**Board Certification**

The American Board of Nuclear Medicine, 07114, 6/2000-2010, Recertified 2015-2025

The American Board of Radiology, 48030, 6/2001-current

**Licensures**

**Active**

Colorado Medical License, CO, DR.0070733, 03/2023

Utah Medical License, UT, 324189-1205, 10/1999

Texas Medical License, TX, Q7163, 2/2016

California Medical License, CA, A75148, 5/2016

**EXPERIENCE/SERVICE**

**Academic Appointments**

Assistant Professor, Department of Diagnostic Radiology, Section of Breast Imaging, University of Colorado Anschutz Medical Campus, Aurora, CO 6/2023-current

Assistant Professor, Department of Breast Imaging, Division of Diagnostic Imaging, The University of Texas MD Anderson Cancer Center, Houston, TX, 8/2019-6/2023

Assistant Professor, Department of Diagnostic Radiology, Division of Diagnostic Imaging, The University of Texas MD Anderson Cancer Center, Houston, TX, 8/2018-08/2019

**Administrative Appointments/Responsibilities**

Automated Breast Ultrasound Screening Program, Lead Physician, The University of Texas MD Anderson Cancer Center, Houston Area Location, West Houston, TX, 1/2022-11/2022

Lead Interpreting Physician and Director of Breast Imaging Services, Houston Methodist Baytown, TX, 2016-2018

**Other Appointments/Responsibilities**

Resident Representative to Faculty Retention Committee, University of Utah, Salt Lake City, UT, 1999-2001

Partner Staff Radiologist and Medical Director of Breast Imaging Services, Utah Imaging Associates, Farmington, UT, 1/2002-9/2008

Radiologist, Radiologic Associates of NW Indiana, Valparaiso, IN, 10/2008-6/2016

Instructor and Adjunct Faculty in Breast Imaging, University of Utah, Huntsman Cancer Institute, Salt Lake City, UT, 5/2009-9/2011

Radiologist, Mountain Medical Physician Specialists, Murray, UT, 7/2011-6/2016

Medical Director for the Breast Care Center at Houston Methodist San Jacinto, Houston Methodist, Baytown, TX, 7/2016-3/2018

**Consultantships**

MammoCare, Bluefield, Virginia, tele-mammography services, 10/2015-7/2018

**Institutional Committee Activities**

Breast Imaging Department Research Committee, Member, 8/2018-present

University of Texas MD Anderson Cancer Center Faculty Senate, Faculty Senator, 12/2020-present

Return to Care, Member, 2/2021-8/2021

Breast Imaging Department Merit Committee, Member, 6/2021-present

Breast Imaging Faculty Retention Program Committee, Member, 10/2021-present

Multidisciplinary Committee on lnvasive Lobular Carcinoma Internal Guidelines, Member, 12/2022-present

**HONORS AND AWARDS**

The American Roentgen Ray Society Clinician Educator Development Program Award, American Roentgen Ray Society, 2019

Invited Publication in Radiographics, Imaging Updates to Breast Cancer Lymph Node Management, Radiologic Society of North America, 2020

Journal of Breast Imaging Editor's Award for Exceptional Reviewer, Society of Breast Imaging, 2020-2021

Scientific Abstract Award: Lobular versus Ductal Invasive Breast Cancer: Biomarkers and Nodal Metastases, American College of Radiology/Society of Breast Imaging Symposium, 2021

**RESEARCH**

**Grants and Contracts**

**Funded**

Principal Investigator, 36 months, Comparative Performance of Molecular Breast Imaging (MBI) to Magnetic Resonance Imaging (MRI) of the Breast in Identifying and Excluding Breast Carcinoma in Women at High Risk for Breast Cancer, Protocol 2020-0927, 2022-present, Prioritizing Research Innovation & Mentoring Excellence (PRIME), MD Anderson Cancer PRIME, 3/1/2022-2/28/2025, $300,000 ($100,000/year)

**Protocols**

**Funded**

As above

**Unfunded**

Principal Investigator, Skipped Nodal Metastases in Breast Cancer Patients: Incidence and Significance to Patient Care, PA18-0959, 2019-2020

Principal Investigator, Lobular versus Ductal Invasive Breast Cancer: Biomarkers and Nodal Metastases, 2020-1145, 2020-2021

Principal Investigator, Cortical Hilar Relationship of Reactive Lymphadenopathy and Metastatic Adenopathy, 2021-0269, 2020-2022

Collaborator, Contrast-Enhanced Mammography (CEM) and CEM-Directed Biopsy for the Evaluation of Extensive Suspicious Mammographic Microcalcifications, 2020-0501, PI - Weaver OO, 2020-present

Principal Investigator, Diagnostic Workup and Outcomes for Women presenting with Nipple Discharge, 2020-1319, 2020-present

Collaborator, Breast Imaging: Return to Care, 2021-0465, PI - Karen Gerlach, 2021

Principal Investigator, Adenopathy Seen in the Setting of Recent COVID-19 Vaccination, 2021-0152, 2021-present

Principal Investigator, Breast Imaging and Breast Cancer Characteristics in Older Women in the US, 2021-0592, 2021-present

Collaborator, Contrast-Enhanced Mammography (CEM) for the Evaluation and Targeted Biopsy of Suspicious Mammographic Architectural Distortions, 2021-0031, PI - Weaver OO, 2021-present

Co-Principal Investigator, Fibroepithelial Lesions Diagnosed at Breast Core Biopsy: Correlation with Clinical, Imaging, and Pathology Outcomes, 2021-0844, PI - Leung, JWT, 2021-present

Principal Investigator, Ultrasound Examination of the Post Mastectomy Patient: Findings, Diagnostic Utility, and Recommendations Based on Presentation, 2021-0019, 2021-present

Principal Investigator, High Risk Lesions of Breast: Outcomes of Radiologic Surveillance versus Surgical Excision, 2022-0618, PI - Chung, Hannah, 2022-present

**PUBLICATIONS**

**Peer-Reviewed Original Research Articles**

1. Sundar KM, Gosselin MV, **Chung HL**, Cahill BC. Pulmonary Langerhans Cell Histiocytosis: Emerging concepts in pathobiology, radiology, and clinical evolution of disease. Chest 123(5):1673-83, 5/2003. PMID: 12740289.
2. **Chung HL**, Parikh JR. Telemammography: technical advances improve patient access in breast care. J Breast Imaging 2(2):152-156, 1/2020.
3. **Chung HL**, Leung JWT. Increased calcifications after chemotherapy. Breast J 26(7):1427-1428, 7/2020. e-Pub 4/2020. PMID: 32246513.
4. **Chung HL**, Leung JWT. Foreign body granuloma from a gunshot injury to the breast. Clinical Imaging 68:197-201, 12/2020. e-Pub 8/2020. PMID: 32892104.
5. **Chung HL**, Middleton LP. Breast amyloidosis in a dormant plasma cell myeloma. Breast J 68(11):2263-2264, 2020. e-Pub 9/2020. PMID: 32939920.
6. **Chung HL**, Sun J, Leung JWT. Breast cancer skip metastases: Frequency, associated tumor characteristics, and role of staging nodal ultrasound in detection. AJR Am J Roentgenol 217(4):1-10, 10/2021. e-Pub 9/2020. PMID: 32997506.
7. **Chung HL**, Leung JWT. Breast cancer recurrences in myocutaneous flap reconstruction. Radiol Case Rep 16(1):40-46, 1/2021. e-Pub 10/2020. PMCID: PMC7599382.
8. Elghazaly H, Aref AT, Anderson BO, Arun B, Yip CH, Abdelaziz H, Ghosn M, Al-Foheidi M, Cardenosa G, Leung JWT, Gado N, Balch CM, Sabry M, Ezz Elarab L, Giuliano AE, El-Zawahry HM, Abdel Karim K, Nasr A, Maki H, **Chung HL**, Saadeddin A, Abdelwahab MM, Al Tahan FM, Chalabi N, Frolova M, Kamal RM, Shehata MA, Bahie Eldin N, Elghazawy H. The first BGICC consensus and recommendations for breast cancer awareness, early detection and risk reduction in low- and middle-income countries and the MENA region. International Journal Of Cancer 149(3):505-513, https://doi.org/10.1002/ijc.33506, 2/2021. PMID: 33559295.
9. **Chung HL**, Shin K, Sun J, Leung JWT. Extra-axillary nodal metastases in breast cancer: Comparative analysis of US vs. MRI, CT, PET. Clin Imaging 79:113-118, 5/2020. PMID: 33933824.
10. **Chung HL**, Tso HH, Middleton LP, Sun J, Leung JWT. Axillary nodal metastases in invasive lobular carcinoma versus invasive ductal carcinoma: Comparison of node detection and morphology by ultrasound. AJR Am J Roentgenol 218(1):33-41, 1/2022. e-Pub 7/2021. PMID: 34319162.
11. **Chung HL**, Le-Petross HT, Leung JWT. Imaging updates to breast cancer lymph node management. Radiographics 41(5):1283-1299, Sep-Oct, 9/2021. PMID: 34469221.
12. **Chung HL**, Whitman GJ, Leung JWT, Sun J, Middleton LP, Le-Petross HT. Ultrasound features to differentiate COVID-19 vaccine–induced benign adenopathy from breast cancer related malignant adenopathy. Acad Radiol 29(7):1004-1012, https://doi.org/10.1016/j.acra.2022.02.015. Epub 2022 Feb 21. PMID: 35296413; PMCID: PMC8858693.
13. **Chung HL**, Bevers TB, Legha RS, Speer ME, Tso HH, Sun J, Leung JWT. Nipple Discharge Imaging Evaluation with Mammography, Ultrasound, Galactography and MRI. Acad Radiol, doi: 10.1016/j.acra.2022.05.013., 6/2022. e-Pub 6/2022. PMID: 35760711.
14. **Chung HL**, Joiner JJ, Pria HR, Jean S, Vishwanath V, DeJesus C, Elhatw A, Guirguis MS, Patel MM, Moseley TW. Breast Imaging Considerations in Symptomatic Young, Pregnant, and Lactating Women. Current Breast Cancer Reports, 4/2023. e-Pub 4/2023.
15. Elhatw A, **Chung HL**, Kamal RA, DeJesus C, Jean S, Vishwanath V, Pria HR, Patel MM, Guirguis MS, Moseley TW. Advanced Breast Imaging Modalities – DBT, CEM, MBI, PEM, MRI, AI. Current Breast Cancer Cancer Reports, 4/2023. e-Pub 4/2023.
16. Jean S, Vishwanath V, **Chung HL**, Moseley TW. Identifying and Reducing Barriers to Breast Imaging. Current Breast Cancer Reports 2023; 15(2):114-118. doi: 10.1007/s12609-023-00480-8. Epub 2023 Apr 5. PMID: 37293273; PMCID: PMC10074341.
17. DeJesus C, Moseley TW, Diaz V, Vishwanath V, Jean S, Elhatw A, Pria HR, **Chung HL**, Guirguis MS, Patel MM. Supplemental Screening for Breast Cancer. Current Breast Cancer Reports, 4/2023. e-Pub 4/2023.
18. DeJesus C, Moseley TW, Diaz V, Vishwanath V, Jean S, Elhatw A, Pria HR, **Chung HL**, Guirguis MS, Patel MM. The Benefits of Screening Mammography. Current Breast Cancer Reports, 4/2023. e-Pub 4/2023.
19. **Chung HL**, Bragg AC, Shin K, Speer ME, Sun J, Leung JWT. Diagnostic ultrasound of the chest wall in the symptomatic patient after mastectomy. Clin Imaging. 2023 May 23; 101:126-132. doi: 10.1016/j.clinimag.2023.05.004. Epub ahead of print. PMID: 37331150.
20. Xie CL, Whitman GJ, Middleton LP, Bevers TB, Bedrosian I, **Chung HL.** Isolated Flat Epithelial Atypia: Upgrade Outcomes After Multidisciplinary Review–Based Management Using Excision or Imaging Surveillance, Journal of Breast Imaging, 2023;wbad049, <https://doi.org/10.1093/jbi/wbad049>

**Journal Reviewer**

Reviewer, Academic Radiology, 2020-present

Reviewer, Journal of Breast Imaging, 2020-present

Reviewer, American Journal of Roentgenology, 2021-present

Reviewer, Clinical Imaging, 2021-present

**TEACHING**

**Teaching Within Current Institution -**

**Formal Teaching**

**Training Programs**

Fellows Didactic Lecture, Breast Ultrasound Lexicon and BIRADS

Fellows Didactic Lecture, 6/2019

Fellows Didactic Lecture, Supplemental Screening beyond Mammography

2/2020

Fellows Didactic Lecture, The American Joint Committee on Cancer 8th edition Breast Cancer Staging, Course Hours: 1

12/2021

**Clinical Residents and Fellows**

The University of Texas MD Anderson Cancer Center Breast Imaging Fellowship, Drs. Whitney Boyce, Frances Perez, Mary Guirguis, Ceren Yalniz, 8/2018-6/2019

The University of Texas MD Anderson Cancer Center Breast Imaging Fellowship, Drs. Rachel Pahls, Michelle Agrons, 7/2019-6/2020

The University of Texas MD Anderson Cancer Center Breast Imaging Fellowship, Drs. Yusuf Akpolat, Jane Shin, Miguel Craig, Alexandra Millet, 7/2021-06/2022

UT McGovern Radiology Residency, Drs. Stephen Neville, Karthik Bande, Andrew Ngo, 12/2021

Research Mentor, MD Anderson Cancer Center Breast Imaging Fellowship, Dr. Charlie Xie, 7/2022-06/2023

The University of Texas MD Anderson Cancer Center Breast Imaging Fellowship. Drs. Charlie Xie, Andrea Tenreiro, Hala Mazin, MD, 7/2022-06/2023

University of Colorado Anschutz, Breast Imaging Fellowship, Dr. Aria Bagheri, 7/2023- current and Radiology Residency 06/2023- current

**Teaching Outside Current Institution**

**Formal Teaching**

**Training Programs**

Resident Didactic Lecture, Rare Breast Tumors: Sarcomas and Lymphomas, University of Texas McGovern Radiology Residency

10/2021

Lecturer, Lymph Nodes in Breast Cancer and other Oncologic Settings, University of Texas McGovern Radiology Residency, Course Hours: 1

12/2022

**CONFERENCES AND SYMPOSIA**

**Presentations at National or International Conferences**

**Invited**

Session II: Breast imaging from the clinician's point of view - breast cancer in young patients, 12th Breast- Gynecological & Immuno-oncology International Cancer Conference, Cairo, Egypt, 1/9/2020

Session IV: Pearls and pitfalls in breast imaging - benign cancer mimics, 12th Breast- Gynecological & Immuno-oncology International Cancer Conference, Cairo, Egypt, 1/9/2020

Session IV: Pearls and pitfalls in breast imaging - MRI morphology descriptors of malignant breast lesions, 12th Breast- Gynecological & Immuno-oncology International Cancer Conference, Cairo, Egypt, 1/9/2020

Workshop: Challenging breast imaging cases - breast imaging case-based review, 12th Breast- Gynecological & Immuno-oncology International Cancer Conference, Cairo, Egypt, 1/10/2020

Session ID: T1-CIN16 Virtual Radiology: From logistics to impact on radiology, 108th Radiological Society of North America Scientific Assembly and Annual Meeting Program, Radiologic Society of North America, Chicago, IL, 11/29/2022

**Other, Including Scientific Exhibitions**

**Chung HL**, Bassett L. Radiologists preferences in digital mammography display, 86th Radiological Society of North America Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL, 12/2000

**Chung HL**, Sun J, Leung JWT. Staging nodal ultrasound in breast cancer: Can metastases skip contiguous nodal basins or do they always follow expected pathways, 105th Radiological Society of North America Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL, 12/5/2019

**Chung HL**, Sun J, Leung JWT. Extra-axillary nodal metastases in breast cancer: Comparative analysis of US vs. MRI, CT, PET, 120th American Roentgen Ray Society Annual Meeting (Electronic Presentation), American Roentgen Ray Society, 5/7/2020

**Chung HL**, Perez F, Leung JWT, Le-Petross HT. Multimodality staging of nodal basins in breast cancer patients, 120th American Roentgen Ray Society Annual Meeting (#E2914) (Electronic Presentation), American Roentgen Ray Society, 5/7/2020

Cohen E, **Chung HL**. Uncommon breast masses, benign: What you need to know (Part II), 106th Radiological Society of North America Scientific Assembly and Annual Meeting Program (Electronic Presentation), Radiological Society of North America, Chicago, IL, 12/2020

**Chung HL**, Cohen E, Leung J. Uncommon breast masses, malignant: What you need to know (Part I), 106th Radiological Society of North America Scientific Assembly and Annual Meeting Program (#200010388) (Electronic Presentation), Radiological Society of North America, Chicago, IL, 12/2020

**Chung HL**, Leung J. Update on the management of the axilla in breast cancer, 106th Radiological Society of North America Scientific Assembly and Annual Meeting Program (#20010291) (Electronic Presentation), Radiological Society of North America, Chicago, IL, 12/2020

**Chung HL**, Tso H, Sun J, Leung J. Lobular versus ductal invasive breast cancer: Biomarkers and nodal metastases, Breast Imaging Symposium, Society of Breast Imaging, N/A, 4/2021

**Chung, HL**, Speer, M, Legha R, Tso H, Leung JWT. Discharging nipple: does it really matter, 107th Radiological Society of North America Scientific Assembly and Annual Meeting Program, Radiological Society of North America, Chicago, IL, 12/2021

**Chung HL**, Shin K, Speer M, Bragg A, Leung JWT. Clinical utility of diagnostic chest wall US in the mastectomy patient, 122th American Roentgen Ray Society Annual Meeting (Oral Presentation), American Roentgen Ray Society, New Orleans, LA, 5/2/2022

Bragg A, Shin K, Speer M, **Chung HL**, Leung JWT. Clinical utility of screening chest wall US in the mastectomy patient, 122th American Roentgen Ray Society Annual Meeting (Oral Presentation), American Roentgen Ray Society, New Orleans, LA, 5/2/2022

**Chung HL**, Whitman GJ, Leung JWT, Sun J, Middleton LP, Le-Petross HT. Ultrasound features to differentiate COVID-19 vaccine-induced benign adenopathy from breast cancer related malignant adenopathy, Breast Imaging Symposium (Oral Presentation), Society of Breast Imaging, Savannah, GA, 5/17/2022

Phalak KP, **Chung HL**, Adrada BE. Breast implant associated anaplastic large cell lymphoma: A multimodality imaging review, 108th Radiological Society of North America Scientific Assembly and Annual Meeting Program (Educational), Radiologic Society of North America, Chicago, IL, 12/1/2022

**Chung HL**, Middleton LP, Bevers TB, Whitman GJ. Outcomes of Lobular Carcinoma In Situ Based on Recommendation for Surgical Excision. Scientific Session 1: Current Challenges for Breast Imagers. Breast Imaging Symposium (Oral Presentation), Society of Breast Imaging, National Harbor, Maryland, 5/4/2023

Xie CL, Whitman GJ, Middleton LP. Bevers TB, Bedrosian I, **Chung HL**. Isolated Flat Epithelial Atypia: Outcomes of Radiologic Surveillance versus Surgical Excision. Breast Imaging Symposium (Digital Presentation), Society of Breast Imaging, National Harbor, Maryland, 5/2023

**Chung HL.** Moseley TW, Wolverton DE. Ductal Carcinoma In Situ: Beyond First Impressions. RSNA Educational abstract. Accepted for RSNA 2023

**Lectureships and Visiting Professorships**

Rare Breast Tumors: Sarcomas and Lymphomas, UT Resident Lecture, University of Texas, Houston, TX, 10/2021

MD Anderson Approach to High-Risk Lesions of the Breast, Visiting Professor Lecture Series, University of Wisconsin and MD Anderson Cancer Center, Houston, TX, 6/15/2022

**Other Presentations at State and Local Conferences**

**Chung HL**. Breast ultrasound lexicon and BI-RADS, Second Annual MD Anderson Cancer Center Breast Imaging Technologist Seminar, The University of Texas MD Anderson Cancer Center, Breast Imaging, Houston, TX, 9/7/2019

Breast cancer: reduce your risk, The University of Texas MD Anderson Cancer Center, TC Energy, Houston, TX, 10/1/2019

**Chung HL**. Multimodality staging of the regional nodal basins, Third Annual MD Anderson Cancer Center Breast Imaging Technologist Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 9/12/2020

**Chung HL**. Use of advanced imaging in the role of adenopathy, Fourth Annual MDACC Breast Imaging Technology Seminar (Virtual), The University of Texas MD Anderson Cancer Center, Breast Imaging, Houston, TX, 9/11/2021

**PROFESSIONAL MEMBERSHIPS/ACTIVITIES**

**Professional Society Activities, with Offices Held**

**National and International**

American College of Radiology

Member, 2011-present

Society of Breast Imaging

Member, 2001-present

American Roentgen Ray Society

Member, 2001-present

Radiologic Society of North American

Member, 2001-present

Society of Nuclear Medicine and Molecular Imaging

Member, 2001-2016

**Local/State**

Texas Medical Association, TX

Member, 2016-present

Harris County Medical Society, Houston, TX

Member, 2018-present

**UNIQUE ACTIVITIES**

* 1. Aunt Minnie article “[SBI: The presence of LCIS indicates increased breast cancer risk (auntminnie.com)](https://www.auntminnie.com/index.aspx?sec=log&itemid=140039)” by Amerigo Allegretto on May 09, 2023. Available at https://www.auntminnie.com
  2. Aunt Minnie article “Chest wall ultrasound good alternative after mastectomy” on May 17, 2022. Available at <https://www.auntminnie.com/index.aspxsec=log&URL=https%3a%2f%2fwww.auntminnie.com%2findex.aspx%3fsec%3dsup%26sub>
  3. Aunt Minnie interview: “Should you offer tele-mammography during COVID-19? Available at <https://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=128781>
  4. "Ladies Night Out." Memorial Hermann Katy Breast Center, October 24th, 2018. Answered questions and distributed information about the importance of breast screening and breast cancer prevention.

**DATE OF LAST CV UPDATE**

7/24/2023